STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-0435

DAVID W. SALYERS, P.E.
COMMISSIONER

BILL LEE
GOVERNOR

December 10, 2019

Via Electronic Mail to wdwhite0@tva.gov
Attn: W. Douglas White, NEPA Specialist
Tennessee Valley Authority
400 West Summit Hill Drive, WT 11B-K
Knoxville, TN 37902

Dear Mr. White:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Tennessee Valley Authority (TVA) Phase 1 East Region Consolidation at the Norris Properties Site *Draft Supplemental Environmental Assessment* (SEA), which evaluates the transport of soil to and from the Engineering Lab and the construction of a stormwater chamber and parking lot at the Engineering Lab located in Anderson County, Tennessee. TVA identified the need to remove soil not suitable for use as stable fill material from the Phase 1 construction area to accommodate the desired grading plan and construction. According to TVA, it is possible additional soil will also need to be brought into the site for use as stable fill material. Total soil moved would be a maximum of 37,000 cubic yards. Additionally, under the Revised Phase 1 Environmental Assessment (EA), the stormwater detention pond was proposed for construction along the southern side of the property adjacent to the property line. Further project planning has identified the need for additional parking at the Engineering Lab. The project needs to evaluate an option of building an enclosed pond and constructing parking a top the stormwater chamber. Actions considered in detail within the Draft SEA include:

- **Alternative A – No Action Alternative –** Under the No Action Alternative, TVA would not relocate and dispose of additional soil from the Engineering Labs and would not construct a stormwater chamber. Phase 1 construction could still proceed. However, because the removal of the soil from the Engineering Labs affects TVA's ability to complete the planned Phase 1 construction, this alternative would not meet the project's purpose and need. However, it is carried forward for analysis as it provides a baseline comparison for the proposed action alternatives.

- **Alternative B – Soil Deposition at Walnut Orchard and an Existing Offsite Landfill and Construction of a Stormwater Chamber** – Alternative B includes the following considerations:

- **Soil Transport** – Under this alternative, TVA would transport up to 37,000 cubic yards of soil to and/or from the Phase 1 project area at the Engineering Labs. Soil transported from the Engineering Lab offsite would be transported to TVA's Walnut Orchard facility and/or an offsite existing permitted landfill within 30 miles of the Engineering Labs facility. Soil transported to the Engineering Lab would be used as stable fill material (the soil being removed from the site is unsuited for this use). This stable fill material could consist of clay or rock and would come from an existing, licensed, and qualified (Section 106 compliant) source location of from TVA's Walnut Orchard site. Total soil moved would be a maximum of 37,000 cubic yards.[1]

  The soil transported from the Engineering Labs to Walnut Orchard would be deposited on currently vegetated areas of the Walnut Orchard property. All vegetation would be cleared and the location grubbed prior to deposition, any trees or brush removed would be hauled offsite or mulched and deposited onsite. A temporary access road would be constructed within the proposed project area at Walnut Orchard and all soil deposition related activities would be concentrated within this area and all related traffic restricted to this road. Existing security fence would need to be taken down to allow access to this new road; repairs and/or addition of a new security gate may be necessary. Existing building slabs would either be left in place or covered with soil. Topsoil at Walnut Orchard would be removed, and temporarily stored onsite during the soil deposition activities.[2] TVA would prepare and comply with a Stormwater Pollution Prevention Plan (SWPPP) and project activities, therefore, could include erosion control measures such as sediment traps, soil fences, and other best management practices (BMP).

  There are two deposition grading options for deposition of the soil at Walnut Orchard. Under both Alternative B1 and B2, the deposited soil would be placed and then compacted to ensure stability, the deposition of soil would raise the elevation of the area surrounding the main complex at Walnut Orchard. Currently the surface surrounding the Walnut Orchard complex slopes away from the complex. The fill would raise the elevation of this surrounding area. A construction access road would traverse the soil deposition area from the main entrance around to the former Building D site on the southwest side of the property. This former Building D site has already been filled with soil transported from the Engineering Lab to Walnut Orchard, previously evaluated under the First SEA. The construction access road would minimize the number of trucks that would enter the main Walnut Orchard complex to avoid potential impacts to operational activities. The filled areas would be replanted with a mix of native and non-invasive vegetation potentially including grasses, shrubs, and trees in accord with the SWPPP.

[1] In preparation for the offsite transport of soil, TVA collected soil samples from Engineering Labs Phase 1 project area from the surface to a depth of 14 feet in accordance with the proposed site grading plan. TVA analyzed these soil samples for 8082A - Standard PCB List 9 Aroclors; Safe and Environmentally Responsible Waste Management, TN EPH-TPH C12-C40 standard Range; and 6010B – TCLP RCRA Metals List. Based on the sample results, soils deemed suitable for reuse as fill material would be eligible for transport to Walnut Orchard. Soils not deemed suitable would be transported to a permitted landfill within 30 miles of the Engineering Labs.

[2] The topsoil would be redistributed on the newly deposited soil prior to reestablishing a vegetative cover of the area. Additional topsoil may need to be brought in to Walnut Orchard. The topsoil would meet the same environmental parameters as the stable fill material.

The TVA road at Walnut Orchard would also be repaired following completion of soil transport activities. Road repair activities could entail fixing localized portions of the road or repairs of the full roadway including removal of existing pavement and replacement with upgraded pavement. The appropriate repairs would be determined at the completion of soil transport activities. For the purposes of this analysis, it is conservatively assumed the entire road would be replaced and repaved.

- **Stormwater Chamber** – Under Alternative B, TVA would consider the construction of an enclosed stormwater chamber at the same location as the stormwater detention pond that was evaluated in the Revised Phase 1 SEA. The stormwater chamber would be an underground system for the collection and controlled release of stormwater from the Engineering Labs. The outfall location for the stormwater chamber would be the same location as for the stormwater detention pond. The outfall would be located on the west side of the pond/chamber and discharge offsite to the west of the Engineering Lab property. The chamber consists of several individual parallel rows of cylindrical, arched chambers with inlets to allow the collection and storage of stormwater, and a single combined outlet that would control the release of the stormwater offsite to the western boundary of the Engineering Lab facility.[3]

- **Alternative C – Soil Deposition at an Existing Offsite Landfill and Construction of a Stormwater Chamber** – Under this alternative, TVA would transport up to 37,000 cubic yards of soil to and from the Engineering Labs; soil transported offsite would go to an existing landfill within 30 miles of the Engineering Labs. As described under Alternative B, TVA would conduct soil sampling prior to disposal at the landfill. Also as described under Alternative B, it is possible additional soil would also need to be brought into the Engineering Labs site for use as stable fill material (the soil being removed from the site is unsuited for this use). This would come from an existing, licensed, and qualified (Section 106 compliant) source location or from Walnut Orchard. Total soil moved would be a maximum of 37,000 cubic yards. Alternative C would also include the potential stormwater chamber option as described under Alternative B.

TDEC has reviewed the Draft SEA and provides the following comments:

Cultural and Natural Resources

TDEC believes the Draft SEA adequately addresses potential impacts to cultural and natural resources within the proposed project area.[4]

[3] The outfall could consist of a c a pipe in a concrete headwall at the western side of the pond or chamber emptying into a concrete flume with a riprap extension down a slope toward the western side of the site, emptying into the drainage that runs along that portion of the site. Alternatively, the outfall could discharge along a riprap only lined slope. The outfall could extend above or below an existing sanitary line in the vicinity.

[4] This is a state-level review only and cannot be substituted for a federal agency Section 106 review/response. Additionally, a court order from Chancery Court must be obtained prior to the removal of any human graves. If human remains are encountered or accidentally uncovered by earthmoving activities, all activity within the immediate area must cease. The county coroner or medical examiner, a local law enforcement agency, and the state archaeologist's office should be notified at once (Tennessee Code Annotated 11-6-107d).

Air Resources

Currently Anderson County is classified as "attaining" the National Ambient Air Quality Standards (NAAQS) and is in an area identified as a partial ozone maintenance area part of the former Knoxville 2008, 8-Hour ozone nonattainment area and is identified as a whole county maintenance area for the Knoxville PM2.5 1997 annual and Knoxville PM2.5 2006 24 Hour nonattainment areas. TDEC encourages TVA to include discussion relating to the NAAQS air quality designations for the Anderson County area in the Final SEA.

TVA includes descriptions and details of the measures designed to mitigate fugitive dust emissions likely to be generated during the phases of the project. If asbestos removal or demolition is also planned to occur additional consideration should be given to ensure that demolition related emissions are minimized, that any asbestos containing material (ACM) is identified and managed properly during demolition and that the appropriate notifications be provided prior to any renovation/demolition activity. TDEC encourages TVA to include these considerations in the Final SEA.

The amount of material to be moved is substantial and will require a significant number of dump trucks and related loading vehicles for use on site. The use of truck wheel washing stations and wetting will likely reduce the possible track-out of fugitive dust generating materials onto local roads and highways leading to the construction location. TDEC encourages TVA to include discussions of the proposed locations for offsite disposal of the unsuitable soils, which could be presented along with a discussion of the alternative locations in the region where disposal could be accomplished. Further, providing discussion of the anticipated emissions generated by the gasoline and diesel fueled trucks and construction equipment used on and offsite and how they are expected to be minimized through the use of proper maintenance and new emissions control technologies and fuels is encouraged along with the minimization of unnecessary heavy duty vehicle idling is encouraged.

Solid Waste

Section 3.13 "Solid and Hazardous Waste" of the SEA outlines the effects of the proposal with respect to solid and hazardous wastes, both of which will be generated in different capacities from actions including but not limited to construction, soil transportation, consolidation activities, and repairs of roads, equipment, and machinery. Per the SEA, there are multiple BMPs and mitigation measures that TVA will utilize to avoid or reduce adverse impacts from the implemented alternatives. Moreover, with respect to the disposal of potentially contaminated soils in a Class I Landfill in Tennessee, TVA would need to obtain approval from TDEC's Division of Solid Waste Management (DSWM) through the Special Waste Program.[5] TDEC encourages TVA to reflect these considerations in the Final SEA.

It is important to note that there is a formal alternate daily cover (ADC) approval process regardless of soil sampling results. Prior to any decision pertaining to the use of soil as ADC, TDEC DSWM will

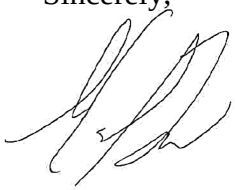
[5] For more information regarding the Special Waste approval process, please visit https://www.tn.gov/environment/permit-permits/waste-permits1/special-waste-approval.html.

need to complete a formal review of the results and address any substantial contaminant issues that may arise.[6] TDEC encourages TVA to include these considerations in the Final SEA.

TDEC recommends that the Final SEA consider and explicitly reflect that any wastes associated with such activities in Tennessee be managed in accordance with the Solid and Hazardous Waste Rules and Regulation of the State of Tennessee (TDEC DSWM Rule 0400 Chapters 11 and 12, respectively).

TDEC appreciates the opportunity to comment on this Draft SEA. Please note that these comments are not indicative of approval or disapproval of the proposed action or its alternatives, nor should they be interpreted as an indication regarding future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.

Sincerely,



Matthew Taylor
Senior Policy Analyst, Office of Policy and Sustainable Practices
Tennessee Department of Environment and Conservation
Matthew.K.Taylor@tn.gov
(615) 532-1291

cc: Kendra Abkowitz, PhD, TDEC, OPSP
Daniel Brock, TDEC, DOA
Lacey Hardin, TDEC, APC
Lisa Hughey, TDEC, DSWM
Tom Moss, TDEC, DWR
Stephanie Williams, TDEC, DNA

[6] For more information regarding the ADC approval process, please visit https://www.tn.gov/environment/program-areas/solid-waste/solid-waste-management.html.